HearthStone®

Quality Home Heating Products

Equinox (8000)

Wood Stove

OWNER'S MANUAL

INSTALLATION AND OPERATING INSTRUCTIONS

Intertek ETL SEMKO

We recommend that our products be installed and serviced by professionals who are certified in the U.S. by NFI (National Fireplace Institute).
www.nficertified.org

Warnock Hersey
C US

PLEASE READ THIS ENTIRE OWNER'S MANUAL BEFORE YOU INSTALL AND USE YOUR NEW EQUINOX WOOD STOVE.

SAVE THIS OWNER'S MANUAL FOR FUTURE REFERENCE

**To reduce the risk of fire, follow the installation instructions.
Failure to follow these instructions can result in property damage,
bodily injury, or even death.**

CONTACT LOCAL AUTHORITIES WITH JURISDICTION (BUILDING DEPARTMENT or FIRE OFFICIALS), ABOUT PERMITS REQUIRED, RESTRICTIONS AND INSTALLATION INSPECTION IN YOUR AREA PRIOR TO INSTALLATION OF THIS STOVE.

Equinox Model #8000
Manual # 6400-40455
Revised: 10/25/2007

Appliance Type: Solid Fuel Room Heater (and/or Fireplace Stove)
U.S. Test Standard: UL 1482 – 2000 (and/or UL 737 – 1998)
Canadian Test Standard: CAN/ULC-S627-M93

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Introducing Your Equinox Wood Stove

Thank you for purchasing an Equinox woodstove from Hearthstone Quality Home Heating Products. This stove will provide you years of comfortable heat. This stove also provides the benefits of advanced technology in wood burning without the cost and maintenance requirements of a catalytic device. The Equinox blends modern technology with classic style and the unique beauty and qualities of cast iron and soapstone. We trust that you will appreciate the quality of this handcrafted product.

Your Equinox woodstove is designed to burn efficiently, and produce a large amount of heat. However, you should not consider your Equinox the only heat source for your home. The Equinox's large size and the very large glass window allow you to enjoy the fire from a variety of locations in the room.

Please read this manual in its entirety. Its purpose is to familiarize you with your stove's safe installation, proper break-in, operation and maintenance. It contains extremely important information so keep it handy and refer to it often.

A qualified heating technician may need this owner's manual as a reference when installing this stove in your home. There are national, state, and local building codes that direct the technician on how to install your stove. These codes stipulate the dimension of stovepipe and clearances to walls, ceilings, hearth, and other combustible surfaces. The codes exist to reduce the risk of fire. Failure to follow these instructions can result in fire, property damage, bodily injury, and even death.

Install the stove in a safe, open area, away from traffic flow, doors, and hallways. Also, consider the weight of the Equinox (689 lbs or 313 kg) when selecting an install location. Ensure the structural integrity of the floor system is sufficient to support the added load. If possible, try to install the stove near an existing chimney and chimney connector. It is extremely important to install this stove with the proper clearance from combustible surfaces. You can purchase specific connector pipe and special wall coverings as specified by this manual and the NFPA 211 code to protect combustible surfaces. Keep furniture, drapes, curtains, wood, paper, and other combustibles at least 36 inches (92 cm) away from the stove. Never install this, or any stove, in a location where gasoline, kerosene, charcoal lighter fluid or other flammable liquids are in use or stored.

Install the stove in your living area to allow heat to radiate naturally to distant rooms. Do not install your stove in a poorly insulated area. This is inefficient and would likely result in higher fuel usage and possibly unsafe burning conditions.

SAFETY NOTICE:
AN IMPROPERLY INSTALLED STOVE CAN RESULT IN A HOUSE FIRE. FOR YOUR SAFETY, CAREFULLY FOLLOW THE INSTALLATION DIRECTIONS. CONTACT LOCAL BUILDING OR FIRE OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION INSPECTION IN YOUR AREA.

The safety of your stove will depend on many factors, some of which include: distance to combustible objects, correct venting, and adequate chimney maintenance. Should you have any questions, do not hesitate to contact your dealer for additional information.

Contact your dealer for any necessary warranty service.

The Equinox Model 8000 is warranted by:

HearthStone *Quality Home Heating Products, Inc*®
317 Stafford Ave.
Morrisville, Vermont 05661

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y115(o)-1uc
aactrrd som
CFRs.

- Burn natural wood only. Higher efficiencies and lower emissions result when burning air-dried, seasoned wood, as compared to green or freshly cut wood. Manufactured wood products may contain adhesives, bonding agents, and coatings that can produce dangerous burning conditions and hazardous fumes.
- Use caution when loading firewood into a hot stove.
- Keep the front and side doors closed and secured at all times except when loading wood or using the spark screen.
- Keep the ash pan tray fully inserted and the ash compartment door tightly closed.
- Inspect the stovepipe, chimney connector and chimney, as recommended.

Follow these safety precautions:

- **Never** modify this stove in any way.
- **Never** burn kiln dried, manufactured, painted, or treated wood in this stove.
- **Never** burn coal in this stove.
- **Never** burn garbage or trash, colored or glossy paper, solvents, plywood, artificial logs, cardboard, or driftwood, in this stove.
- **Never** use gasoline, kerosene, charcoal lighter fluid, or other flammable fluids to start or invigorate the fire. These fuels will cause dangerous burning conditions in the stove. Keep all such materials away from the stove.
- **Never** use the stove if the ash pan compartment door is open, damaged, not present, or does not fully seal.
- **Never** use a wood grate or other device to elevate the fire.
- **Never** allow logs in the firebox to contact the glass when the door is closed. Logs touching the glass as they settle during burning is okay.
- **Never** slam the door or use the door to force wood in to the stove.
- **Never** over-fire your stove. (See page 18)
- **Never** put articles of clothing or candles on a hot stove.
- **Never** connect the stove to a flue used by another appliance.

Other safety guidelines

- Keep all combustible items such as furniture, drapes, clothing, and other items, at least 36" (0.92 m) from the stove (See page 8)
- Install a smoke detector, preferably in an area away from your wood stove in accordance with its manufacturer's instructions.
- Keep a fire extinguisher handy. We recommend the type rated "A B C."
- Dispose of ashes properly. (See page 18)
- Keep children and pets away from the stove when it is burning; serious injury can result from touching a hot stove.
- Clean your chimney system as needed. (See page 20)

PERIODIC CHECKLIST

Perform each of these tasks at, or before the specified intervals.

At the End of Every Week:

- Empty ashes from the firebox and ash pan, sooner if the firebox or the ash pan is full.

At the Beginning of Every Other Month:

- Depending upon your use of the stove, visually inspect the chimney connector and chimney for creosote. (See page 20)
- Check door seals using the "dollar bill test." - When the stove is cool, shut the door on a dollar bill. If the bill pulls out without any resistance, then your stove's door is not sealing properly. To tighten the seal, adjust the door latch mechanism or change the door gasket. (Refer to page 20.)

At the End of Every Season:

- Dismantle the chimney connector and clean it thoroughly. Replace any pieces that show signs of rust or deterioration.
- Inspect and, if necessary, clean your chimney.
- Thoroughly clean the inside of the stove.
- Inspect all door gasket material and replace if missing, worn, frayed, cracked or extremely hard.
- Inspect and replace cracked or damaged refractory soapstone in the firebox.

EMERGENCY PROCEDURES

If you have a stovepipe or chimney fire, follow these instructions:

1. If the fire is too threatening, leave the area and call the fire department immediately! If not, perform the next three steps.
2. Close the primary air control.
3. Close the stovepipe damper (if present).
4. Keep the stove's front and side doors, and ash compartment door closed!

WARNING

DO NOT ATTEMPT TO PUT OUT A STOVEPIPE OR CHIMNEY FIRE BY THROWING WATER ONTO THE STOVE, STOVEPIPE, OR CHIMNEY. THE EXTREMELY HIGH TEMPERATURE OF SUCH FIRES CAN CAUSE INSTANTANEOUS STEAM AND SERIOUS BODILY HARM.

Once the chimney fire expires, leave the primary air control closed and let the fire in the stove die out completely. Inspect the stove, stovepipe, and chimney thoroughly for any sign of damage before firing the stove again. You must correct any damage before using your stove again.

SPECIFICATIONS

Maximum Heat Output
120,000 BTU per hour of cordwood (based on independent laboratory test results).

Floor Size of Heated Area
Up to a maximum of 3,500 square feet. Factors unique to your home can reduce the square footage the stove will heat. Home insulation value, number and efficiency of windows, floor plan, stove placement, quality of the fuel and other conditions may limit the heating ability of the stove.

Firebox Capacity
4.0 cubic feet, or 80 pounds of wood. The amount and weight of wood contained per cubic foot of firebox volume can vary from 15 to 36 lbs. per cubic foot depending on type of wood, moisture content, packing density and other factors. As a constant for comparison and test purposes, we are assuming 20 lbs. of seasoned hardwood per cubic foot of firebox volume.

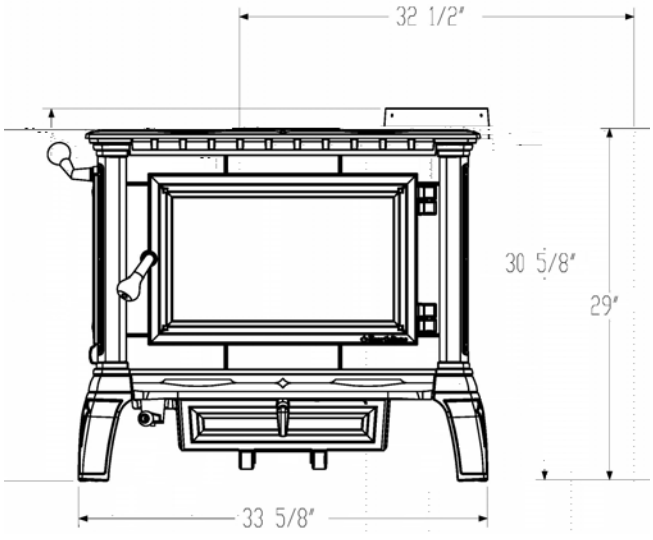
Maximum Log Length: 27”

Front Door Opening Size: 19.25" wide x 10" high
Side Door Opening Size: 13" wide x 8.5” high

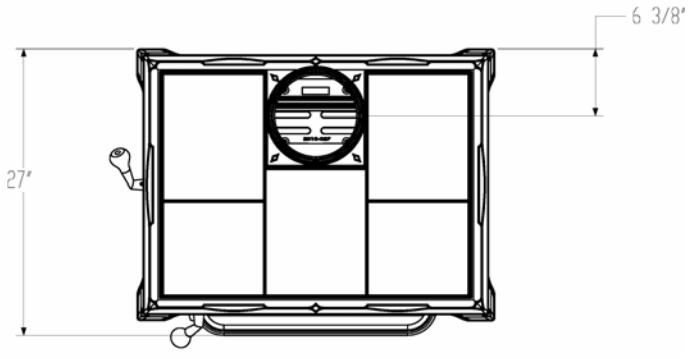
Stove Dimensions:

Height (includes flue collar):	30-5/8" (77.8 cm)
Width:	33-5/8" (85.4 cm)
Depth:	27" (68.6 cm)
Actual Weight:	689 pounds (313 kg)

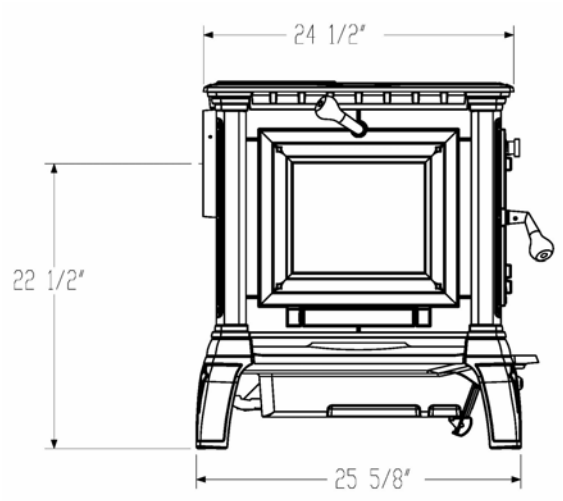
Crate Dimensions: H-40” W-41” D-31” (includes pallet).



View 1 – Equinox Front



View 2 - Equinox Top



View 3 - Equinox Left Side

Flue Exit: Top or rear

Stovepipe Size: 8" (203 mm) diameter

Metal Chimney: 8" (203 mm) inside diameter

Masonry Chimney: 8" (203 mm) inside diameter (round flue) 8” x 8” (203 x 203mm) (square flue)

Optional Equipment:

Rear Heat Shield	90-68000
Outside Air Kit	90-53500
Blower	90-57502
Spark Screen	90-69000
Side Door Lock Kit	90-70200

Soapstone Finish[1] Smooth, Polished Gray Soapstone

[1]Gray soapstone is a natural product and colors will vary from stone to stone. Various amounts of gray, charcoal, blue and green are evident dependant on the natural composition of the stone.

Setting Up Your Equinox Wood Stove

UNPACKING

HearthStone packages your Equinox stove with the greatest care so that it ships safely. Under certain circumstances, however, damage may occur during transit and handling. When you receive the Equinox, carefully unpack and inspect the stove and all accompanying parts. Make sure that all parts are included in the box. If any parts are damaged or missing, please contact your dealer immediately.

INSTALLING YOUR STOVE

Choose a place to install your Equinox woodstove. Inspect this location to make sure that the stove and stovepipes will have the required clearance from combustible materials that are near the stove. Combustibles include walls, floor, ceiling, and chimney chase. You must carefully consider the clearances to all of these combustibles before actually connecting your stove.

Consider the weight of the Equinox [689 pounds (313 kg)], and its hearth. You must ensure the floor system will support the weight of the stove and hearth. If you are not certain your floor is adequate, contact a professional structural engineer for advice.

If the floor is made of combustible material, then a non-combustible floor protector with at least an R-1 rating is required between the floor and this stove. *An example of a non-combustible floor protector is a hearth constructed with a continuous layer of a listed backer board (such as Micore, Wonder-Board or Durock) used for ember protection with a tile, brick, slate, or another non-combustible facing.*

If you use a close clearance connector pipe, ensure it is listed with Underwriter's Laboratories. Check the listing of your pipe with UL for the correct clearances.

The diagrams in this manual represent typical installations, but are specific to the Simpson Dura-Vent DVL brand.

Clearances to NFPA Code 211 Protected Surfaces

You can reduce the clearances to combustible surfaces by using any National Fire Protection Agency (NFPA) approved wall protection system. Please refer to NFPA Code 211 for specifications and complete details. You can obtain this information directly from the NFPA.

National Fire Protection Agency
Batterymarch Park
Quincy, MA 02269
1-800-344-3555
1-617-770-3000

HEARTH REQUIREMENTS AND FLOOR PROTECTION

Ensure you protect combustible flooring with a covering of noncombustible material. The floor protection must extend beyond the **body** of the stove at the minimum as follows:

* Installations in Canada require 18" (45.72 cm) of floor protection on the sides with doors, and 8" (20.32 cm) on the sides without a door.

** Rear clearance required only if stovepipe runs horizontally back above the top of the stove.

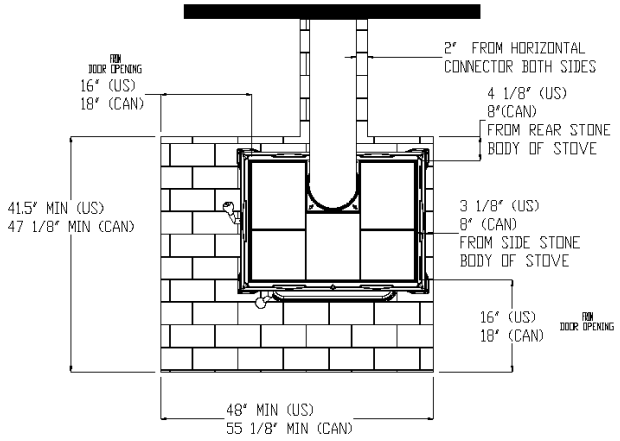


Figure 1

Equinox Hearth Requirements (R-1 minimum)

Note: *Dimensions shown in the previous figure are from the body of the stove.*

Floor protectors come with various types of specifications. To convert a floor protector's specification to an R-value, do one of the following:

- If the R-value is given, use that value—no conversion is needed.
- If a K-factor is given with a required thickness (T) in inches, use this formula: R-value = 1/K x T
- If a C-factor is given, use the formula: R-value = 1/C

To determine the R-value of the proposed alternate floor protector:

- Use either the K-factor or the C-factor formula explained above to convert specifications not expressed as R-values.
- For multiple layers of floor protectors, simply add the R-values of each layer to determine the overall R-value of the layers.

If the overall R-value of your setup is greater than the R-value of the specified R-1 requirement, then your setup is acceptable.

Noncombustible Material	*Thickness*	*R-value*
Gypsum or plaster board[1]	1/2″	0.45
Wallboard, Wonderboard, or Durock[1]	1/2″	0.20
Ceramic board (Fiberfrax or Micor)[1]	1/2″	1.10
Nominal solid clay brick[1]	1″	0.20
Ceramic wall or floor tile[1]	1/4″	0.01
Mineral wool insulation[2]	1″	3.12
Cement mortar[2]	1″	0.20
Horizontal still air[2]	1/8″	0.92

[1] According to Intertek Testing Services, Inc.
[2] According to ASHRAE Handbook of Fundamentals 1977

Handle Assemblies
Locate the handles, and bolts enclosed in the envelope with the owner's manual. Place the knob on the bolt and then push it through the knob so that the bolt threads extend through the bottom of the knob. Using a slotted screwdriver, turn the bolt into the handle crank on the door, until snug.

Handle Operation

Front Door – when closed, the handle will be in the 7 o'clock position. To open the front door, rotate the handle clockwise to approximately the 10 o'clock position. Side Door – when closed, the handle is in the 8 o'clock position. To open the door rotate the handle clockwise to approximately the 12 o'clock position.

OUTSIDE AIR SUPPLY

(Kit #93-53500)
You can connect an outside air source directly to this stove using an optional outside air kit. The advantage of providing outside air directly to the stove is that the air used by the stove for combustion is taken from outside the residence rather than from within the room where the stove is located.

The outside air kit for this stove allows for the direct connection of the stove's air intake to a minimum 3" (76 mm) diameter duct (supplied by others) which leads to the outside of the house. When considering placement of the duct from the outside of the house to the hearth, keep in mind the need to avoid structural members of the house. The outside air kit will attach to the back of the stove.

The International Residential Code (IRC) does not allow the outside air duct to terminate higher than the appliance. Some building officials also do not like to see any vertical rise in the duct's termination. HearthStone recommends the termination be at the same level, or lower than the air intake on the stove.

Locate the termination of the duct on the outside wall of the home in such a manner to avoid the possibility of obstruction by snow, leaves or other material. Screen the termination using ¼" x ¼" mesh rodent screen and cover it with a rain/wind proof hood (flex pipe, outside termination, mesh, and hood supplied by others) Contact your dealer for availability.

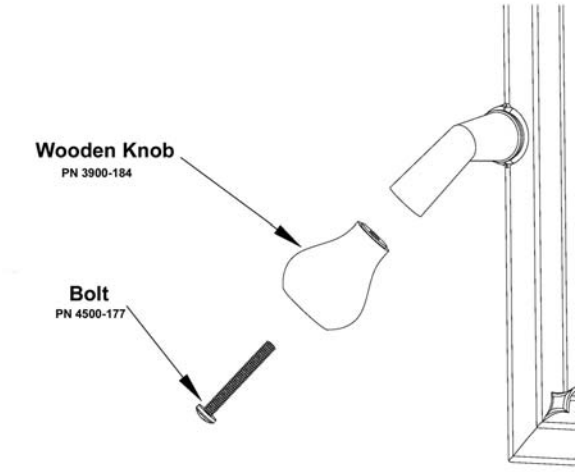


Figure 2: Front and Side Door Handle

COMBUSTIBLE SURFACE REQUIRED CLEARANCES:

It is very important to follow minimum clearances for chimney connectors to combustibles such as walls and ceilings when installing the stove near combustible surfaces.

MINIMUM CLEARANCES TO COMBUSTIBLES (from closest point of stove)

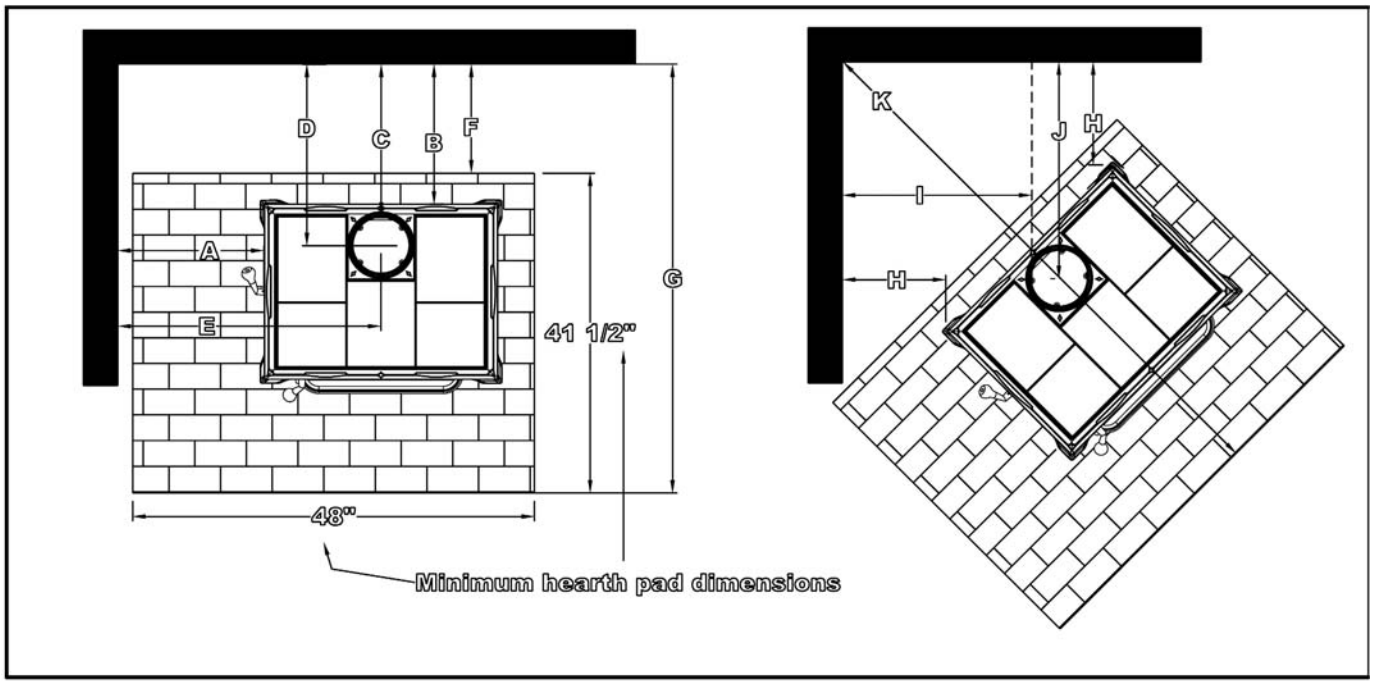


Figure 3: Freestanding Installation Clearances (US Requirements)

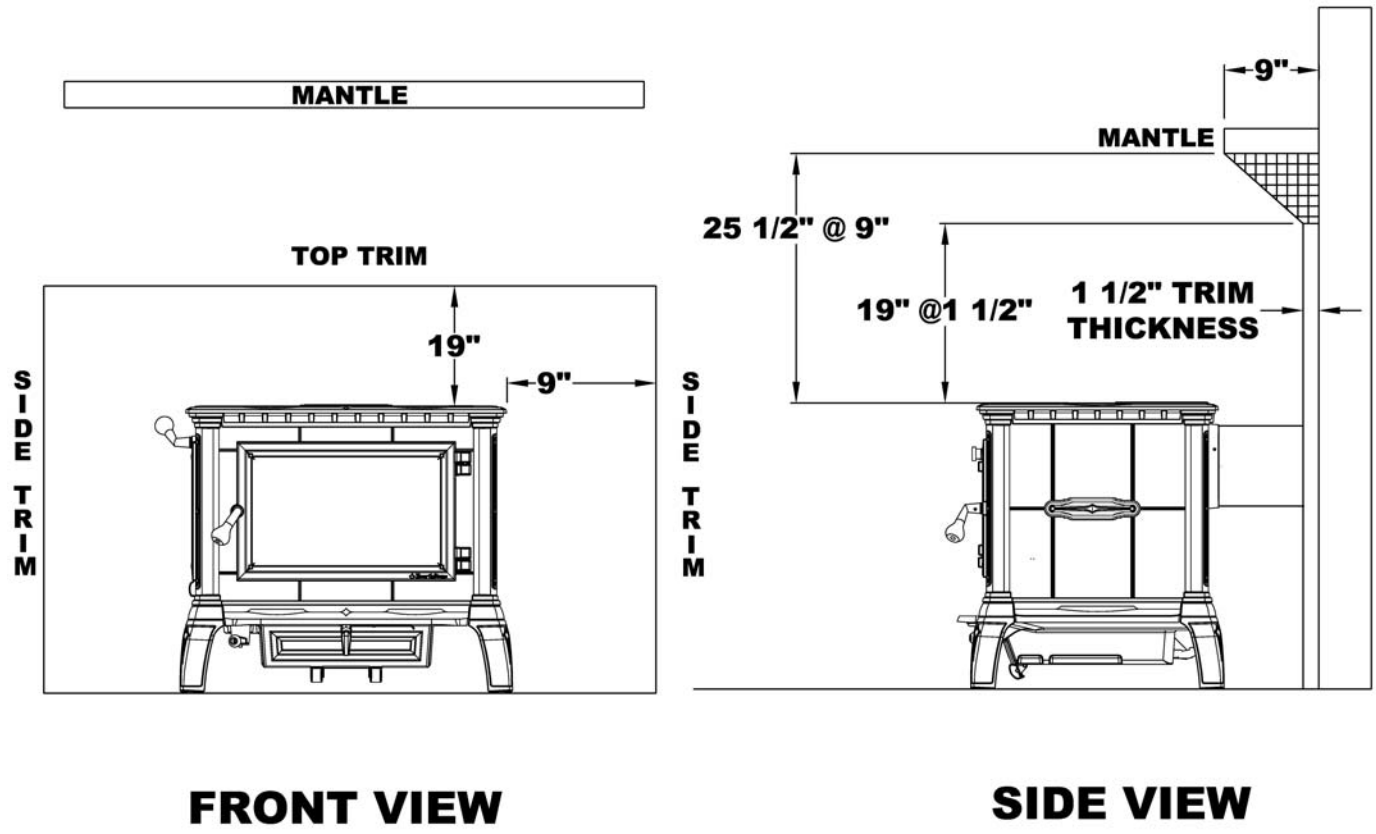


Figure 4: Fireplace Installation Clearances

FREESTANDING COMBUSTIBLE SURFACE CLEARANCE DIMENSIONS (Inches)

	Parallel						Corner				
Installation type	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**
No Heat Shield & single wall connector	21	21	22-3/4	26-3/4	37-1/4	18-1/4	59-3/4	15	26-3/8	30-3/8	76
No Heat Shield & double wall connector	20	17	18-3/4	22-3/4	36-1/4	14-1/4	55-3/4	14-1/2	25-7/8	29-7/8	75-1/3
Rear Heat Shield & single wall connector	22	8 *	9-3/4	13-3/4	38-1/4	5-1/4	46-3/4	15-1/2	26-7/8	30-7/8	76-3/4
Rear Heat Shield & double wall connector	19	6 *	7-3/4	11-3/4	35-1/4	3-1/4	44-3/4	13-1/2	24-7/8	28-7/8	73-7/8

*Measured from the body of the stove, not the heat shield

ALCOVE COMBUSTIBLE SURFACE CLEARANCE DIMENSIONS (Inches)

Installation type	A	B	Top of Stove to Ceiling
No Heat Shield & single wall connector	20	21	67
Rear Heat Shield & single wall connector	21	8	67
Rear Heat Shield & double wall connector	20	6	67

If you use a rear heat shield to obtain reduced clearances, you must only use the optional rear heat shield manufactured by HearthStone specifically for the Equinox Model 8000 (Heat Shield part number: 90-68000) , which is available through your local dealer. Use only close clearance connector pipe tested to UL standards and listed. Check listings of your pipe for actual clearances. Measurements shown above and on the following page are specific to the Simpson Dura Vent DVL brand. Do not reduce clearances without the use of the rear heat shield and/or with close clearance connector pipe and/or by protecting the combustible surfaces per NFPA 211 standards.

See NFPA-211 for protected surface clearance requirements.

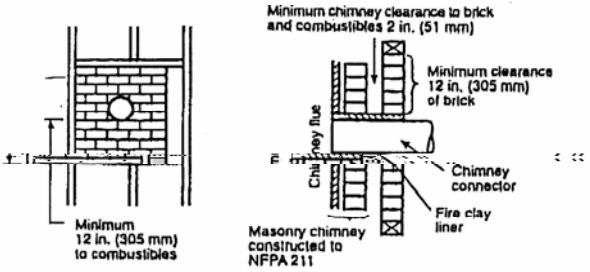
HearthStone's Thermo-Ceramic Baffle System

To enhance the combustion efficiency and reduce the emissions from the fire in your stove, HearthStone QHHP, Inc. has developed an advanced THERMO-CERAMIC baffle system. This system uses a lightweight, durable ceramic material above the secondary air tubes to maintain the high temperatures in the secondary combustion area and maintain the low emission – high efficiency combustion you desire. This new technology will not corrode, rust, dissolve or lose its strength, however it is vulnerable to puncture or cracking due to rough handling.

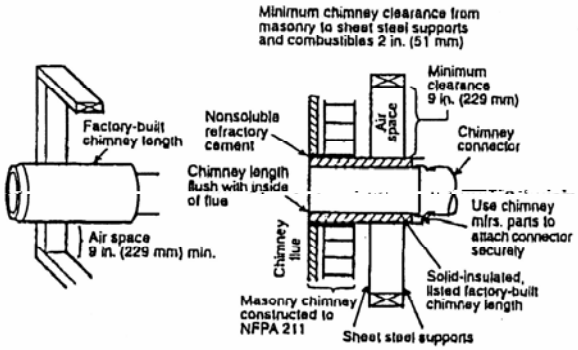
PLEASE EXERCISE CARE WHEN LOADING WOOD OR CLEANING YOUR STOVE, NOT TO DAMAGE THE Thermo-Ceramic BAFFLE

Located directly above the burner tubes in the firebox, this white sheet of material will break if wood or cleaning brushes impact it. Be careful when loading and cleaning your stove to not break this material. If this piece is fractured or a hole is punctured, it will cause the stove to function improperly. You must replace the board if there is damage. Contact your HearthStone dealer for a replacement.

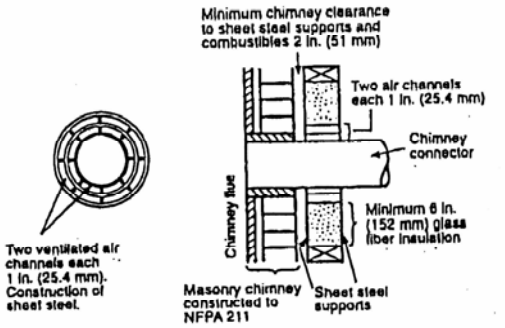
Chimney Connector Systems and Clearances from Combustible Walls for Residential Heating Appliances


Minimum chimney clearance to brick and combustibles 2 in. (51 mm)
Minimum clearance 12 in. (305 mm) of brick
Chimney flue
Chimney connector
Fire clay liner
Masonry chimney constructed to NFPA 211
Minimum 12 in. (305 mm) to combustibles

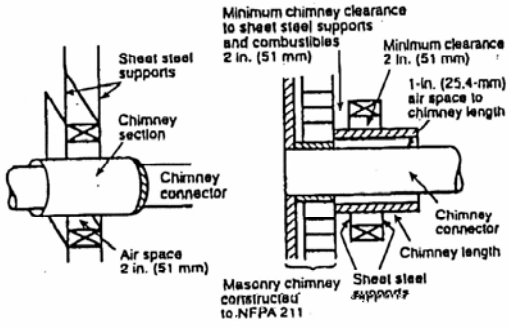
A Minimum 3.5-in thick brick masonry all framed into combustible wall with a minimum of 12-in brick separation from clay liner to combustibles. The fire clay liner shall run from outer surface of brick wall to, but not beyond, the inner surface of chimney flue liner and shall be firmly cemented in place.


Minimum chimney clearance from masonry to sheet steel supports and combustibles 2 in. (51 mm)
Factory-built chimney length
Nonsoluble refractory cement
Minimum clearance 9 in. (229 mm)
Air space
Chimney connector
Chimney length flush with inside of flue
Use chimney mfrs. parts to attach connector securely
Air space 9 in. (229 mm) min.
Chimney flue
Solid-insulated, listed factory-built chimney length
Masonry chimney constructed to NFPA 211
Sheet steel supports

B Solid-insulated, listed factory-built chimney length of the same inside diameter as the chimney connector and having 1-in. or more of insulation with a minimum 9-in. air space between the outer wall of the chimney length and combustibles.


Minimum chimney clearance to sheet steel supports and combustibles 2 in. (51 mm)
Two air channels each 1 in. (25.4 mm)
Chimney connector
Chimney flue
Minimum 6 in. (152 mm) glass fiber insulation
Two ventilated air channels each 1 in. (25.4 mm). Construction of sheet steel.
Masonry chimney constructed to NFPA 211
Sheet steel supports

C Sheet steel chimney connector, minimum 24 gauge in thickness, with a ventilated thimble, minimum 24 gauge in thickness, having two 1-in. air channels, separated from combustibles by a minimum of 6-in. of glass fiber insulation. Opening shall be covered, and thimble supported with a sheet steel support, minimum 24 gauge in thickness.


Minimum chimney clearance to sheet steel supports and combustibles 2 in. (51 mm)
Minimum clearance 2 in. (51 mm)
Sheet steel supports
1-in. (25.4-mm) air space to chimney length
Chimney section
Chimney connector
Chimney connector
Chimney length
Air space 2 in. (51 mm)
Masonry chimney constructed to NFPA 211
Sheet steel supports

D Solid insulated, listed factory-built chimney length with an inside diameter 2-in. larger than the chimney connector and having 1-in. or more of insulation, serving as a pass-through for a single wall sheet steel chimney connector of minimum 24 gauge thickness, with a minimum 2-in. air space between the outer wall of chimney section and combustibles. Minimum length of chimney section shall be 12-in. chimney section spaced 1-in. away from connector using sheet steel support plates on both ends of chimney section. Opening shall be covered, and chimney section supported on both sides with sheet steel supports securely fastened to wall surfaces of minimum 24 gauge thickness. Fasteners used to secure chimney section shall not penetrate chimney flue liner.

VENTING COMPONENTS AND CONFIGURATION REQUIREMENTS

- **DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVING ANOTHER APPLIANCE**

- Single wall connector that is 24 MSG or 25 MSG blued steel stovepipe.

- Double wall connector (close clearance pipe) which is used with a listed, factory-built "Type HT" chimney or with a masonry chimney to reduce clearances, is available from several manufacturers, your dealer can help you choose. Some air insulated connector pipe models available are Simpson Dura Vent DVL and Metalbestos DS. Security, GSW and Ameritec also have acceptable close clearance connector pipe.

- When used in a mobile home, a spark arrestor is required. (See page 15)

- The chimney connector cannot pass through a floor or ceiling, nor any attic or roof space, closet or similar concealed space. Where venting requires passage through a wall or partition of combustible construction, the installation must conform to NFPA Code 211 or CAN/CSA - B365.

- It is very important to follow minimum clearances for chimney connectors to combustibles such as walls and ceilings when installing the stove. Typical chimney connector clearances are outlined on the previous page. The single wall clearances are generic; the double wall clearances shown are for Simpson DuraVent DVL. **CHECK THE SPECIFICATIONS FROM THE MANUFACTURER OF YOUR CONNECTOR.**

Components of a Venting System

The complete venting system consists of several components: chimney connector, wall thimble, wall pass-through, chimney, and liner. It is *absolutely necessary* that you install all of these components and maintain the clearances to combustibles discussed earlier to ensure a safe stove installation.

To protect against the possibility of a house fire, you *must properly install and constantly maintain the venting system.* Upon inspection, immediately replace rusted, cracked, or broken components.

- The *chimney connector* is the stovepipe from the woodstove to the chimney. The chimney connector for the Equinox is 8" (203 mm) diameter, 24 MSG or 25 MSG blued steel connector pipe. *Do not use aluminum or galvanized steel pipe* - they cannot withstand the extreme temperatures of a wood fire.

- The *thimble* is a manufactured (or site-constructed) device installed in combustible walls through which the chimney connector passes to the chimney. It keeps the walls from igniting. You must use a wall thimble when installing a chimney connector through a combustible wall to the chimney.

- A *wall pass-through* (or chimney support package) also keeps the walls from igniting. You must use one when connecting through a wall or ceiling to a prefabricated chimney.

- Only install this stove to a *lined masonry chimney* or an approved high temperature *prefabricated residential* type building heating appliance chimney. *Do not* connect this stove to a chimney serving another appliance; you will compromise the safe operation of both the wood stove and the connected appliance.

- **WARNING:**
  DO NOT CONNECT THIS APPLIANCE TO ANY AIR DISTRIBUTION DUCT OR SYSTEM.

- A *liner* is the UL 1777 or ULC S635 (for factory built fireplace or masonry) chimney.

You must connect your stove to a chimney comparable to those recommended in this manual. *Do not use stovepipe as a chimney*. Use stovepipe for freestanding installations only to connect the stove to a proper chimney.

Installing a Venting System

Attach stovepipe sections to the flue collar and to each other with the crimped end toward the stove. If creosote builds up, this allows the creosote to run into the stove and not on the outside of the stovepipe or onto the stove.

Secure all joints, including attaching the stovepipe to the stove's flue collar, with three sheet metal screws. Install #10 x 1/2" (3 mm x 13 mm) sheet metal screws into the holes pre-drilled in the flue collar. Disregarding the screws can cause joints to separate from the vibrations that result from a creosote chimney fire.

You can simplify connecting stovepipe by using additional accessories such as telescoping pipes, slip-connectors or clean-out tees. These accessories ease the periodic inspection of your chimney, as well as allow you to dismantle the stovepipe easily (without moving the stove).

Install the stove as close as practical to the chimney, while maintaining all proper clearances. Install stovepipe that is as short and as straight as possible. Horizontal runs of stovepipe must always rise away from the stove at a minimum of 1/4" per foot (21mm/m).

We do not recommend long runs of stovepipe to increase heat dispersal. Longer lengths of stovepipe or more connecting elbows than necessary increase the chances of draft resistance and the accumulation of creosote buildup.

In general, you do not need to install a stovepipe damper with the Equinox. Some installations, however, could benefit from a stovepipe damper, such as a tall chimney which can create a higher than normal draft. In such cases, a damper can help regulate the draft. The Equinox requires a draft between 0.06" and 0.1" Water Column. For drafts above 0.1" Water Column, install a stovepipe damper. Check the draft at stove installation time.

Remember, the NFPA recommends minimum clearances for chimney connectors to combustibles such as walls and ceilings. Once the stove is installed at safe distances from combustible surfaces, it is important to also maintain these connector clearances for the remainder of the installation.

CONNECTING THE STOVE TO A CHIMNEY

You can install your Equinox to a prefabricated metal chimney, or a masonry chimney (see Figures 5 and 7). Ensure the chimney size is not less than, or more than three times greater than, the cross-sectional area of the flue collar.

Connecting to a Prefabricated Metal Chimney

There are two ways to install a prefabricated metal chimney:

- An *interior* installation where the chimney passes inside the structure through the ceiling and roof
- An *exterior* installation where the chimney passes through the wall behind the stove then up the outside of structure

Whenever possible, choose an interior chimney. An interior chimney heats up quickly and retains its heat; thus promotes a better draft and discourages the formation of creosote. An exterior chimney does not benefit from the warmth of the building, so it typically operates at lower flue temperatures. An exterior chimney's draft is not as strong and may experience increased creosote accumulation.

When connecting the Equinox to a prefabricated metal chimney, you must follow precisely, the manufacturer's installation instructions. Use only Type HT (2100 deg. F), prefabricated metal chimneys listed per UL 103 or ULC S629 standards.

The Equinox requires a minimum 8" (203 mm) inside diameter flue. An 8" diameter flue provides adequate draft and performance. You can use a larger diameter existing flue with a reducer – see NFPA 211. Note that an oversized flue contributes to creosote accumulation. (In this case, bigger is NOT better.)

When purchasing a prefabricated chimney to install with your stove, Ensure you also purchase from the same manufacturer the wall pass-through (or ceiling support package), "T" section package, fire-stops (when needed), insulation shield, roof flashing, chimney cap, and any other needed accessories. Follow the manufacturer's instructions when installing the chimney and accessories. In addition, ensure you maintain all manufacturers' recommendations for the proper clearances to the chimney.

Connection to a Masonry Chimney

Consider two primary elements when connecting your stove to a masonry chimney: the chimney itself and the thimble where the stovepipe connects to the chimney. Use only Code approved masonry chimneys with a flue liner.

Before connecting to a masonry chimney, hire a professional to examine the chimney for cracks, loose mortar, and other signs of deterioration and blockage. If the chimney needs repair, complete them before installing and using your stove. Do not install your stove until the chimney is safe for use. Make sure the chimney's cleanout is complete and working properly. To avoid a loss of draft, the cleanout door must close completely and provide a tight seal. If the cleanout door leaks, the chimney will cool, your stove will perform poorly, and creosote will build up.

Make sure the size of the chimney's flue is appropriate for this stove and that it is not too large. You can use a masonry chimney with a larger tile size – but see NFPA 211 for limitations. An oversized flue reduces draft, and contributes to the accumulation of creosote.

Use the following checklist to ensure that your masonry chimney meets these minimum requirements:

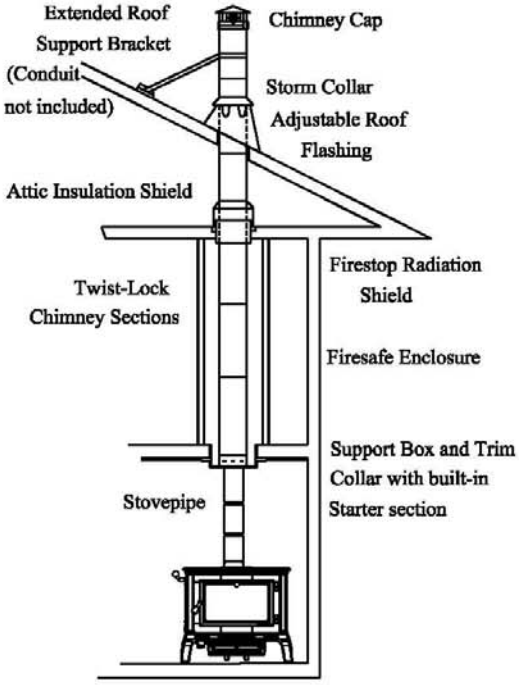
Masonry Chimney wall construction:
- Mortared brick or modular block at least 4" (102 mm) thick
- A mortared rubble or stone wall at least 4" (102 mm) thick

Flue liner options:
- Tile - minimum wall thickness of 5/8" (16 mm)
- Tile - installed with refractory mortar
- Tile - at least 1" (25 mm) air space around liner
- Stainless steel - UL listed 8" diameter
- Stainless steel - fill space around liner with vermiculite (keeps liner warmer for better performance)
- Ensure an equivalent flue liner is a listed chimney liner system meeting type HT requirements or other approved material.

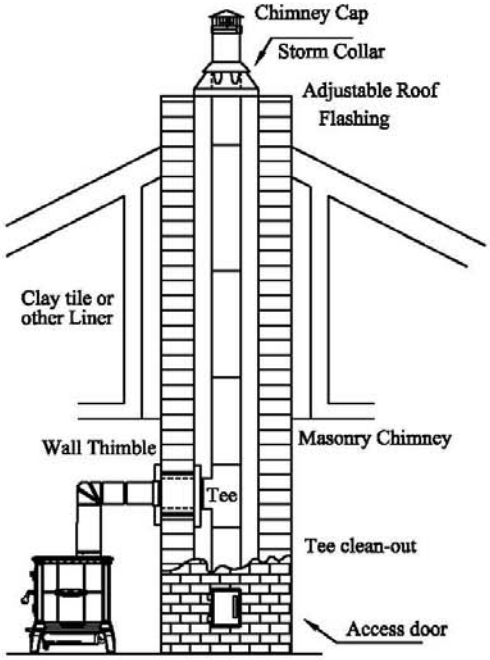
Interior chimney requirements:
- At least 2" (51 mm) clearance to combustible materials
- Fire stops installed at the spaces where the chimney passes through floors and/or ceiling
- Any insulation is at least 2" (51 mm) from the chimney

Exterior chimney requirements:
- At least 1" (25 mm) clearance to combustible materials

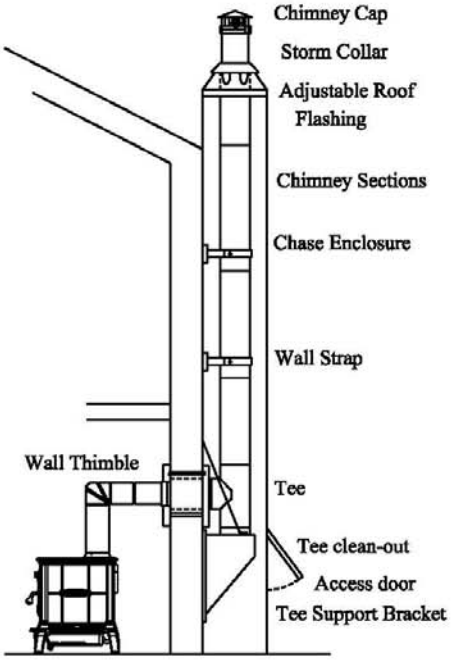
Chimney height requirements (See Figure 6):
- At least 3 feet (0.9 m) higher than the highest part of the roof opening through which it passes.
- At least 2 feet (0.6 m) higher than any part of the roof within 10 feet (3 m) measured horizontally from the top of the chimney.
- This stove requires a minimum chimney height of 13 feet (4 m).



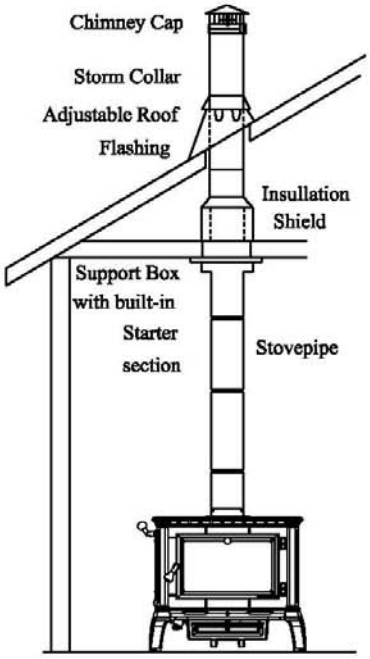
Two story house installation with attic.



Chimney pipe through Clay tile
or other Lined Masonry Chimney

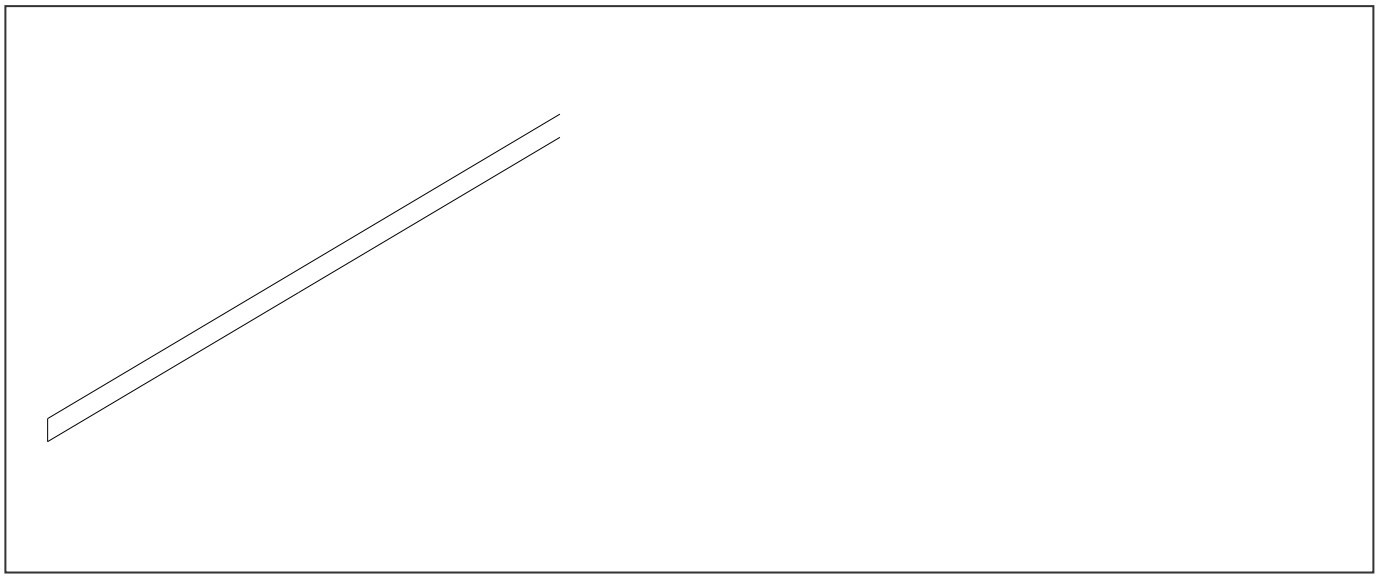


Chimney through outer wall with enclosed chase.
Chimney is supported by Tee Support Bracket.



One story house installation with attic.
Chimney is supported by Ceiling.

Figure 5: Typical Acceptable Chimney Configurations



INSTALLING IN A MOBILE HOME

Follow these special requirements for installing your stove in a mobile home.

- Install the stove in accordance with 24 CFR, Part 3280 (HUD).
- A chimney cap spark arrestor is a requirement in mobile home installations.
- HearthStone recommends you install at least one smoke detector.
- Permanently attach the stove to your mobile home's floor. Use appropriate bolts through the existing holes in the legs, or use the clips that secured the Equinox to the pallet.
- Mobile home installations require the use of an outside air adaptor kit:

  HearthStone Kit # 93-53500 (See page 7)

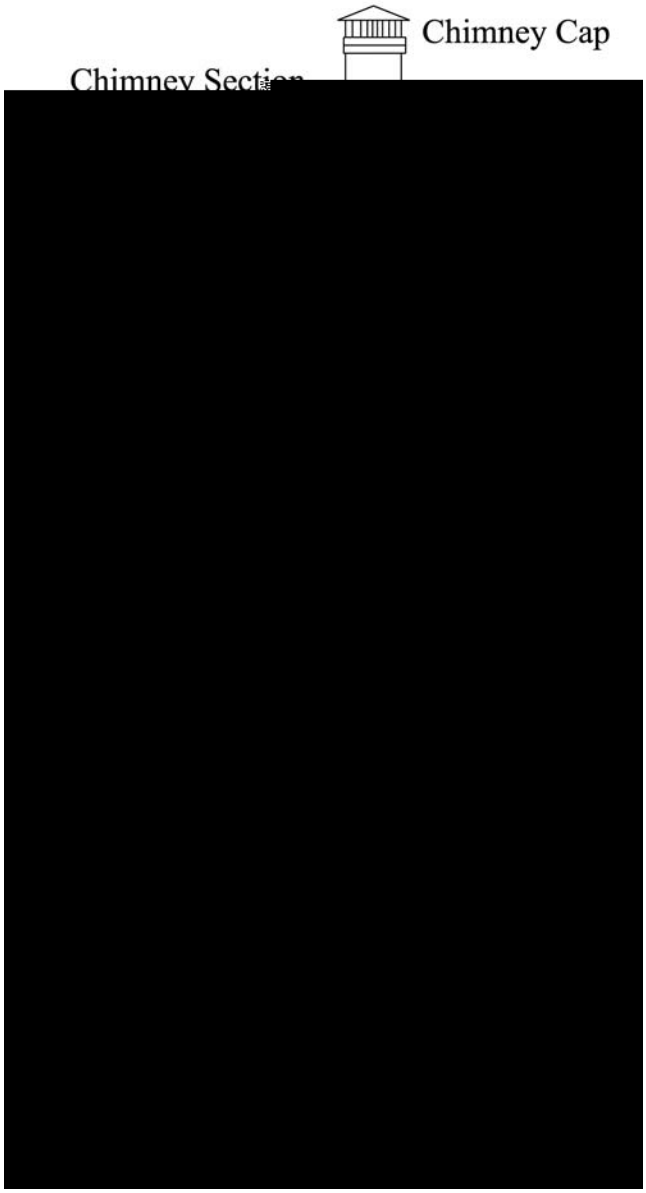
- Install the following Dura-Vent Mobile Home Chimney & Connector Kit (or equivalent):

  8DP-MH 8" Diameter S/N 9296N

  Each kit includes:
  Stainless spark arrestor cap, storm collar,
  Adjustable vented flashing – 0/12 – 6/12,
  Two 24" Dura/Plus* chimney pipes, 24" Support box with built-in starter section and trim. You must provide the appropriate connector pipe.

  * (UL or ULC approved equipment is acceptable)

- Remove the entire chimney and connector pipe prior to transporting the mobile home. Flexing of the structure during movement could damage the chimney components if not removed.



WARNING:
DO NOT INSTALL IN A SLEEPING ROOM IN A MOBILE HOME.

CAUTION:
MAINTAIN THE STRUCTURAL INTEGRITY OF THE MOBILE HOME WALLS, FLOOR, CEILING, AND ROOF WHEN INSTALLING AND USING YOUR STOVE.

Operating Your Equinox Wood Stove

Once your Equinox is set in place, connected, and assembled, you are ready to light a fire. HearthStone tests each wood stove before we ship it, so you will easily light your first fire.

WARNING:
HOT WHILE IN OPERATION! KEEP CHILDREN, CLOTHING AND FURNITURE AWAY. CONTACT CAN CAUSE SKIN BURNS.

Read this entire chapter before lighting your first fire. It explains the controls and features of your wood stove, how to choose firewood, and how to use your stove on a daily basis.

CONTROLS AND FEATURES

Before lighting any fires, become familiar with the location and operation of your stove's controls and features and learn how to use them. For your own safety, do not modify these features in any way. *The Equinox wood stove radiates heat into the surrounding area. In doing this, the controls of the heater can become very hot. Please use caution when using any of the controls. Do not use the controls unless the stove is cool or you have a hearth glove.*

FRONT & SIDE DOOR HANDLES: *(These become hot during operation. Use a fireplace glove to open the handle while the stove is in use)* The front & side doors allow you to load wood into your stove; fixed handles operate the doors. To open either door, rotate the handle clockwise and pull the door away from the stove. To latch the door, push the door tightly towards the firebox then rotate the handle counter clock-wise until it stops.

ASH GRATE LEVER: (This becomes very hot during operation. It is best to operate the ash removal system after the stove cools.) The ash grate lever folds up, and is located directly under the front edge of the ash lip. Reach under the right side of the ash lip and rotate the handle outward clockwise until it is fully extended. Use the ash grate lever only to open the ash grate to allow movement of the ashes from the firebox to the ash pan. Pull the lever out to open the grate. Once you have sifted the ashes through the grate into the ash pan, push the lever back in towards the stove to close the grate. Rotate the lever counterclockwise to store it back under the ash lip.

ASH PAN: (This becomes hot during operation. It is best to remove the ash pan only after the stove cools). To access the ash pan you must open the ash pan compartment door (rotate the handle ¼ turn clockwise), which is located under the front ash lip. Open the control door and locate the ash pan handle. To remove the ash pan, grip the handle and then pull it out. The ash pan drawer will slide out with the ash pan and provides support for the pan while you install the pan's lid. Lift the ash pan off the drawer with the lid's handle. The lid for the ash pan is stored under the stove, or where convenient for you. Use the lid only to contain the ashes during transport for disposal – do not leave in place. The ash pan collects the ash residue from each fire and when full, allows you to remove the ash conveniently from your wood stove. Clear the firebox of ashes periodically by opening the ash grate in the bottom of the firebox. Sift the ashes through the grate into the ash pan, and then return the grate to its closed position.

To replace the ash pan, place the pan back onto the drawer ensuring the tabs engage the notches. Slide the ash pan and drawer back into place in the ash pan compartment. Lift and latch closed the compartment door by turning the handle counter-clockwise ¼ turn. **Do not operate the stove unless the ash compartment door is closed, and properly sealed. Not doing this could overheat and damage the stove.**

PRIMARY AIR CONTROL: (This becomes hot during operation. It is best to operate the primary air system with a fireplace glovel.) The primary air control handle is located on the front lower left of the stove, just under the left edge of the ash lip. The primary air control allows you to regulate the amount of air entering the firebox. Generally, the more air allowed into the firebox, the faster the rate of burn; conversely, less air creates a slower burn. For maximum air flow, move the primary air handle as far left as possible; move the primary air control handle as far to the right as possible for minimum air flow (does not close completely).

CHOOSING FIREWOOD

Your Equinox Wood Heater is designed to only burn firewood - also known as cordwood.

CAUTION:
DO NOT USE CHEMICALS OR FLAMMABLE FLUIDS SUCH AS GASOLINE, NAPHTHA, KEROSENE, CHARCOAL LIGHTER FLUID OR ENGINE OIL TO START A FIRE. DO NOT USE CHARCOAL, PELLETS, COAL, ARTIFICIAL LOGS OR ANY OTHER MATERIALS AS FUEL; THEY ARE NOT SAFE. DO NOT BURN GARBAGE.

The quality of your firewood directly affects heat output, duration of burn and performance of your stove. Softwoods gey

MEDIUM HIGH: White Ash, Beech, Yellow Birch, Sugar Maple, and Red Oak

MEDIUM LOW: Black Ash, White Birch, Grey Birch, Elm, Norway Pine, Pitch Pine, Black Cherry, Soft Maple, Tamarack

LOW: White Pine, White Cedar, Balsam Fir, Spruce, Aspen, Basswood, Butternut, Hemlock

Moisture content also plays a key role in the performance of your stove. Wood freshly cut from a living tree (green wood) contains a great deal of moisture. As you might expect, green wood burns poorly. You must season green wood before using it in your wood stove. To season green wood properly, split, stack, and allow it to air dry for a period of one year.

Stack the firewood on skids or blocks to keep it off the ground, cover only the top of the stack. Plastic or tarps that cover the sides of the woodpile trap moisture and prevent the wood from drying. As for stacking, an old Vermonter said, "The spaces between the logs should be large enough for a mouse to get through, but not for the cat that's chasing it."

CAUTION:
Do not store firewood within the stove's specified clearances to combustible materials.

BUILDING A FIRE

Once you understand the controls of your wood stove and have the appropriate firewood, you are ready to start a fire.

BREAKING IN YOUR WOOD STOVE

It is imperative that your stove is "broken in" slowly. Soapstone must be "seasoned"; over-firing a new stove may cause soapstone to crack or may damage other stove parts. Removing the moisture in the soapstone slowly is critical to minimize the “shock” to the stone at its first exposure to high firebox temperatures. In addition, any moisture remaining in the asbestos-free furnace cement must also be slowly removed to ensure adequate sealing and bonding.

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good, hot fire will clean the glass. We recommend a visual inspection (and cleaning if necessary) of your stovepipe and chimney after the break-in procedure is completed.

NORMAL OPERATION

Prior to loading the stove, make sure the ash grate and the ash compartment door are closed. If left open, the stove will over-fire and will suffer damage.

BUILDING A FIRE FOR EVERYDAY USE

1) Open the front door and place five or six double sheets of tightly twisted newspaper in the center of the firebox. Arrange kindling in a crisscross pattern over the newspaper. Use approximately 10 pieces of kindling, 1/2" (13 mm) in diameter and 10" to 20" (254 mm to 508 mm) long.

2) Fully open the primary air control by moving it completely to the left.

3) Light the paper under the kindling. Briefly leave the front door slightly ajar until the kindling burns and draft begins to pull.

4) Close the door and allow the fire to burn.

5) Once the kindling is burning well, open the front door and add logs - small at first, to build the fire up. Ensure you keep the logs away from the glass in front in order for the air-wash system to work properly. Keep the front and side doors, and ash compartment door closed while the stove is in use.

6) Once the fire is burning well, use the primary air control to regulate the desired rate of burn. Move the handle to the left to open the primary air control for a high rate of burn; or push it to the right for a low rate of burn. The air control does not close completely.

Note: When opening the front door to reload or re-arrange logs, it is advisable to open the door just a crack, pause for a moment, then open the door completely. This procedure allows the firebox to clear of smoke before the door is open fully. In addition, reloading on a bed of hot, red coals reduces smoking time and brings fresh fuel up to a high temperature rapidly.

BURN RATE

HIGH BURN: Fully load the firebox with wood on a bed of hot coals or on an actively flaming fire and fully open the primary air control by moving it all the way to the left, away from the ash lip. A high burn rate once or twice a day to heat the stovepipe and chimney fully, will help minimize creosote accumulation.

MEDIUM HIGH BURN: With the primary air control in the open, left most position, push the control handle about ¼ to ½ the distance to the right.

MEDIUM LOW BURN: With the primary air control in the open, left most position, push the handle about ¾ of the distance to the right. A medium-low burn rate is the typical setting and is preferable if the stove is unattended.

LOW BURN: Push the primary air control inward all the way to the right. This closes the air shutter to its minimum opening. A low burn rate over extended periods is not advisable as it can promote the accumulation of creosote. Inspect the venting system frequently if using low burn rates consistently.

OVER-FIRE CAUTION

Over-firing means the stove is operating at temperatures above the recommended temperatures outlined in the *BURN RATE* section. Carefully avoid over-firing, as it will damage the stove. Symptoms of chronic over-firing can include cracked stones, warped components, short burn times, a roaring sound in the stove or stovepipe, and discoloration of the stovepipe.

Excessive draft, inappropriate fuel, and operator error can cause over-firing. Correct an over-fire situation as follows:

- EXCESSIVE DRAFT: Contact your local dealer to have a draft reading taken. Any draft in excess of 0.1 Water Column requires a damper in the stovepipe. Some installations may require more than one damper.
- INAPPROPRIATE FUEL: Do not burn coal; kiln dried lumber, wax logs or anything other than natural cordwood.
- OPERATOR ERROR: Ensure all the gaskets are in good condition. Replace worn out or compressed gaskets. Do not burn the stove with the front or side door, ash compartment door, or the ash grate in the open position.

If you suspect that your stove is over-firing, contact your dealer immediately. **Damage caused by over-firing is not covered by your warranty**. Results of over-firing can include warped or burned out internal parts, cracked stones, discolored or warped external parts, and damaged finish.

- **CAUTION:**
  Never use gasoline, lantern fuel, kerosene, diesel, heating fuel oil, charcoal lighter fluid or similar liquids to start, or 'freshen up' a fire in this heater. Keep all such liquids well away from the heater while it is in use.

- **CAUTION:**
  Install a carbon monoxide detector if using the stove with the optional spark screen installed (front door opened). Follow the manufacturer's installation instructions. Carbon Monoxide is a colorless, odorless gas that replaces oxygen. High concentrations of Carbon Monoxide are lethal.

REMOVAL AND DISPOSAL OF ASHES

Remove ashes only when the stove is cold. Use protective fireplace gloves if the ash pan is warm. Exercise extreme caution when handling, storing or disposing of ashes.

The ash pan is behind the ash compartment door located under the front ash lip. The ash pan collects burned ash from a fire and allows you to remove the ash conveniently from your wood stove. Clear the firebox of ashes often, and do not let them build up too high. It is important to prevent ashes from building up around the front door opening. To remove ashes, unfold and pull the grate lever out to open the grate. Sift the ashes across the grate into the ash pan. Then return the ash grate to its closed position by pushing the lever back in towards the stove and then fold it back under the ash lip. The ash pan is easy to remove and has a handle and lid for convenient disposal of ashes.

Dump ashes from the ash pan directly into a **metal** container with a tight fitting lid. Do not place any other items or trash into the metal container. Do not pour water into the container. Replace the container's lid and allow the ashes to cool. Never place the ash disposal container on a combustible surface or vinyl flooring, as the container could be **hot!**

Pending disposal, place the closed ash container on a noncombustible floor or on the ground, well away from all combustible materials, liquid fuels, or vehicles. Retain ashes in the closed container until all coals thoroughly cool.

- **NEVER** place ashes in wooden or plastic containers, in trashcans with other trash, or in paper or plastic bags, no matter how long the fire has been out. Coals within a bed of ashes can remain hot for several days once removed from the firebox.

Maintaining Your Equinox Wood Stove

NOTE: ANY SYMPTOMS OF OVER-FIRING WILL VOID YOUR WARRANTY!

CREOSOTE FORMATION AND NEED FOR REMOVAL

When wood burns slowly at low temperatures, it produces tar and other organic vapors, which combine with expelled moisture to form creosote. These creosote vapors condense in the relatively cool chimney flue of a slow-burning fire. As a result, creosote residue accumulates on the flue lining. When ignited, this creosote makes an extremely hot fire, which may damage the chimney or even destroy the house. When burning wood, inspect the chimney connector and chimney at least once every two months during the heating season to determine if there is a creosote buildup.

To prevent the buildup of creosote:

Burn the stove with the primary air control fully open for 35 - 45 minutes daily to burn out creosote deposits from within the stove and the venting system.

After reloading with wood, burn the stove with the primary air control fully open for 20 to 30 minutes. This manner of operation ensures early engagement of the secondary combustion system that minimizes creosote buildup in the chimney.

If a creosote build-up occurs, inspect the stovepipe connector and chimney more often, at least monthly during the heating season to monitor the accumulation. If a creosote residue greater that 1/4" (6 mm) accumulates, remove it to reduce the risk of a chimney fire.

If your glass always remains dirty, your operating temperatures are too low or your wood is wet; therefore, there is a higher risk of creosote buildup.

Inspect the venting system at the stove connection *and* at the chimney top. Cooler surfaces tend to build creosote deposits faster, so it is important to check the chimney at the top (where it is coolest) as well as from the bottom near the stove.

Remove accumulated creosote with a cleaning brush specifically designed for the type of chimney in use. Use a certified chimney sweep to perform this service. Contact your dealer for the name of a certified chimney sweep in your area (your dealer may be a certified sweep).

We recommend that before each heating season you have the entire system professionally inspected, cleaned and repaired, if necessary.

FRONT DOOR REMOVAL PROCEDURE:

1. Open the door 45 to 90 degrees.
2. Remove the front door by lifting it straight up off the hinges with the hinge pins remaining in the door.
3. It may be necessary to apply considerable upward pressure on the door while swinging it back and forth slightly to work the hinge pins out of the bronze bushings.
4. Take care to avoid scratching the adjacent soapstone when the hinge pins come free.

GASKETS

Replace door gasket material every two to three seasons, depending on stove use. If the door seal leaks, a new gasket will ensure a tight seal and improve stove performance.

We recommend you only use HearthStone replacement gaskets and adhesive when you need to replace your door gasket. Contact your dealer for a gasket kit that includes instructions, adhesive, and the gasket for your stove.

Required Door Gasket: Part Number: 3110-051, 68" Length, 1/2" Diameter.

FRONT DOOR GASKET REPLACEMENT PROCEDURES:

1. To replace the front door gasket, remove the door from the stove (see door removal instructions above), Pull off the old rope gasket. Carefully remove any old gasket material and adhesive with a small screwdriver, or small cold chisel and a hammer. Clean all gasket channels with a small wire brush if necessary.
2. Apply a small amount of waterglass (sodium silicate), or a 1/8 inch bead of an approved gasket adhesive into the bottom of the entire gasket groove.
3. Start at the center of the hinge side of the door and push the new gasket into place uniformly without stretching or compressing the gasket material. Pinch the gasket into place as necessary.
4. Once the gasket is installed, re-install and close the door immediately to fully seat the gasket in the channel and ensure complete adhesion. Waterglass will dry quickly, and does not require heat to cure. Other adhesives may need heat to cure – so follow the product manufacturer's instructions.
5. Check the gasket seal using a dollar bill. Place the bill in various locations around the door. Close the door and remove the bill by pulling it out. If the bill slides out without resistance, the seal will leak. If the bill does not slide out, the door is too tight, and the gasket will wear quickly. If the test reveals varying results in different locations – the gasket may not be installed uniformly, or too much adhesive was used.
6. First, adjust the gasket as necessary by reseating it uniformly. If that does not work, adjust the latch mechanism so it applies more or less pressure when the door is closed.

SIDE DOOR GASKET REPLACEMENT PROCEDURES:

1. To replace the side door gasket, open the door and support it so the hinge plate supports no weight. Remove the three allen head bolts and lift the plate out of the way.
    a. *Do not remove the door! The side door uses torsion springs to ease closing. Removing the door could cause unexpected spring tension release.*
2. Pull off the old rope gasket. Carefully remove any old gasket material and adhesive with a small screwdriver, or small cold chisel and a hammer. Clean all gasket channels with a small wire brush if necessary.
3. Apply a small amount of waterglass (sodium silicate), or a 1/8 inch bead of an approved gasket adhesive into the bottom of the entire gasket groove.
4. Start at the center of the hinge side of the door and push the new gasket into place uniformly without stretching or compressing the gasket material. Pinch the gasket into place as necessary.
5. Once the gasket is installed, re-install the hinge plate and close the door immediately to fully seat the gasket in the channel and ensure complete adhesion. Waterglass will dry quickly, and does not require heat to cure. Other adhesives may need heat to cure – so follow the product manufacturer's instructions.

LATCH ADJUSTMENT PROCEDURES:

(Latch Kit #90-73010)

1. Test gasket seal quality with small latch adjustments first. Too much pressure makes the door difficult to open and close and prematurely wears the gasket.
2. Loosen the setscrew and rotate the handle assembly to increase or decrease spring pressure.

GLASS

Do not operate the stove with a broken door glass. Do not abuse the front door by striking or slamming. When necessary, clean the glass with commercial stove glass cleaners, which are available from your local dealer. Never attempt to clean the glass while the fire is burning or while the glass is hot. Remove deposits by following the instructions provided with the cleaner. To clean heavier, stubborn deposits, remove the door from the stove (See door removal procedures on page 20). Lay the door face down on a clean, padded workbench or table with the handle hanging over an edge, apply the cleaner to the glass and allow it to soak for a few minutes to allow the cleaner to penetrate any heavy deposits. Wipe the cleaner off with a soft cloth, or black & white newsprint.

> **Important:** scratching or etching the glass will weaken the integrity of the glass. Do not use a razor blade, steel wool, or any other abrasive material to clean the glass. Use a cleaner specifically manufactured for woodstoves only.

The front door glass is a 5mm ceramic, shock-resistant glass, made specifically for use in woodstoves. Do not use any replacement glass other than the ceramic glass manufactured and supplied for use by HearthStone in this woodstove. Replacement glass is available through your local dealer.

Replace the door glass immediately if broken or chipped. Contact your local dealer for replacement glass. The glass kit includes instructions and everything needed for the repair. If you replace the glass yourself, wear work gloves and safety glasses.

Required Glass Kit: Part Number: 90-58205 (5mm Ceramic Glass, gasket, and clips).

GLASS REPLACEMENT PROCEDURES:

1. Follow the instructions included with the replacement glass kit.
2. Remove the door (see door removal procedure on page 20).
3. Remove the screws from the glass retainer clips (use penetrating oil if necessary) – remove the clips (8) and lift off the glass. Set aside the clips for reinstallation.
4. Carefully lift the damaged glass out of the door and discard.
5. Remove any remaining glass and old gasket material.
6. Clean the screw holes and place a small amount of anti-seize compound in each one.
7. Install the ¼ inch rope gasket – peel off the adhesive backing, and press the gasket uniformly into the gasket channel.
8. Place the new glass onto the door.
9. **Important! Center the glass** and ensure that the edges of the glass are parallel with the edges of the opening.
10. Check glass position again (centered, and parallel), then screw the glass retainer clips back on the door.
11. Apply a light film of anti-seize lubricant on the door's hinge pins and bushings if needed.
12. Install the door.
13. After five or six fires, check the glass clip screws, and retighten if necessary.

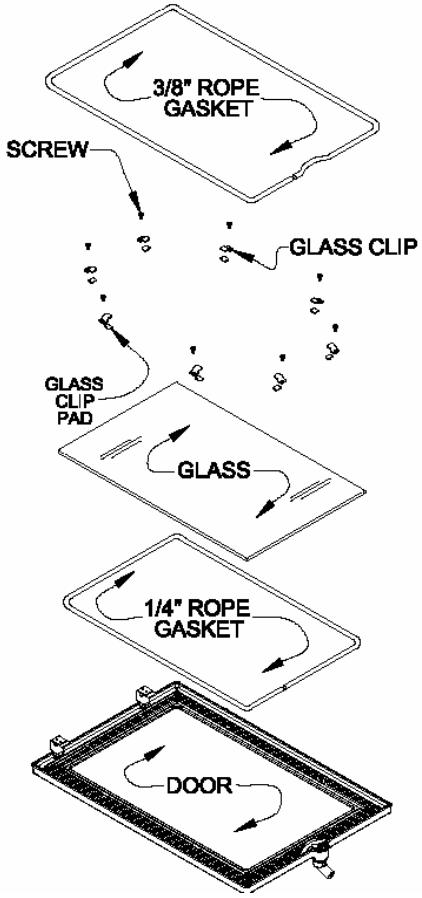


Figure 8: Door & Glass Assembly

STONE

Occasional cleaning is all that is necessary to maintain the natural beauty of your stove's soapstone finish. Clean the soapstone with water, any non-abrasive cleaner and a soft cloth. Wipe dust from the stone with a clean cloth. Do not use chemical agents to wash the stone; do not use waxes or any polishing agents on the stone.

Take care not to scratch or chip the soapstone. Do not set items that can scratch or chip the stone on top of your stove. Do not use sandpaper to buff out scratches, as it will remove the polished surface of the stone.

Contact your local HearthStone dealer for accessories such as trivets, or soapstone tiles if you intend to place metal pots on the stove. Your HearthStone dealer has a soapstone steamer pot available, which will complement your soapstone stove.

Often, with use and over time, subtle earth tones of brown, red, and yellow may appear in the soapstone. This is a natural reaction in the soapstone. Surface or hairline fractures may also appear in the stone after a stove is used. Such changes are normal and do not affect the operation or the integrity of the stove and do not require replacement.

If you observe a completely broken stone, contact your dealer for a replacement. Please note that a replacement stone will most likely not exactly match your existing stones. When HearthStone manufactures a soapstone woodstove, we strive to match all the stones on the stove as closely as possible. However, over time, the original stones on your stove will change as mentioned above. In addition, even stone from the same quarry is not uniform in grain, or color.

TROUBLESHOOTING

Common Issues

Virtually all woodstove operators experience basic common problems at one time or another. Most are correctable and generally require only a minor adjustment of the stove, installation, or operating technique. In cases where weather conditions dramatically affect stove performance, the problems are typically temporary and solve themselves once the weather changes.

If you question whether your stove is producing adequate heat, the best way to troubleshoot the problem is to monitor the temperature of the chimney connector (single wall) no more than 12 inches (30 cm) above the flue collar. A 400° F (200° C) single wall stovepipe confirms the stove is supplying sufficient heat. If you are using a double wall chimney connector, measure the temperature at the flue collar. Keep in mind that your house itself will regulate room/house temperatures. How well the walls, floors and ceilings are insulated, the number and size of windows, the tightness of outside doors, and the construction or style of your house (vaulted ceilings or other open spaces which collect large percentages of heat, ceiling fans, etc.) all are determining factors of room temperature.

Your stove's performance is also dependant on its installation. One common cause of poor performance is an oversized chimney flue. Oversized chimney flues result in decreased draft, which prevents the smoke from rising out the chimney. Oversized flues are also more difficult to heat effectively, especially when burning a high efficiency stove. Cool flue temperatures inhibit the establishment of a strong draft (and encourage the accumulation of creosote). The lack of a strong draft will cause the fire to die down and may even force smoke to pour into the room.

If your chimney is the proper size and a strong draft is not easily established, there is the possibility that the chimney is too cold. Again, hot chimneys promote stronger drafts. Opening a window briefly while lighting the stove may help.

Other draft guidelines are as follows:

An **"AIRTIGHT" HOUSE:** The air supply (infiltration) to the interior of the house may be inadequate if your home is super-insulated or especially well sealed. This phenomenon of air starvation within the building is exacerbated if exhaust fans, such as clothes dryers, bathroom fans or cookstove exhaust fans, are in operation within the home. Outfitting your stove with the optional outside air adaptor connected to an air duct, which leads to the outside of the building, can correct this problem.

TALL TREES OR BUILDINGS: These obstructions, when located close to the top of the chimney can cause chronic or occasional downdrafts. When selecting a site for a new chimney, consider the placement of other objects near the proposed chimney location.

WIND VELOCITY: Generally, the stronger and steadier a wind, the stronger (better) the draft. However, "gusty" wind conditions can cause erratic downdrafts. For consistent problems, consider a high wind cap, such as the Vacu-Stack.

BAROMETRIC PRESSURE: Chimney drafts are typically sluggish on balmy, wet or muggy days (low barometric pressure). This is a weather-related phenomenon, which generally is self-correcting as the weather changes.

BRISKNESS OF FIRE: The hotter the fire in your stove, the hotter your chimney and, therefore, the stronger the draft.

BREAKS IN THE VENTING SYSTEM: An unsealed clean-out door at the bottom of the chimney, leaky stovepipe joints, a poor stovepipe-to-thimble connection, missing caps, or a leaky chimney all can cause inadequate draft.

SEASONAL FACTORS: Early fall and late spring are generally difficult seasons in which to establish proper drafts. The colder the outside air is relative to room temperature, the stronger the draft.

Operating the Stove

As outlined above, there are days when a good draft is just not easy to establish. The causes are usually seasonal factors or a cold chimney. Try starting the fire by using small kindling and fuel to obtain a quick, hot fire. Tend the fire frequently with small fuel until the chimney is hot and the draft is well established. Sometimes, partially opening a first floor window briefly will help quickly get draft established.

TROUBLESHOOTING GUIDE:

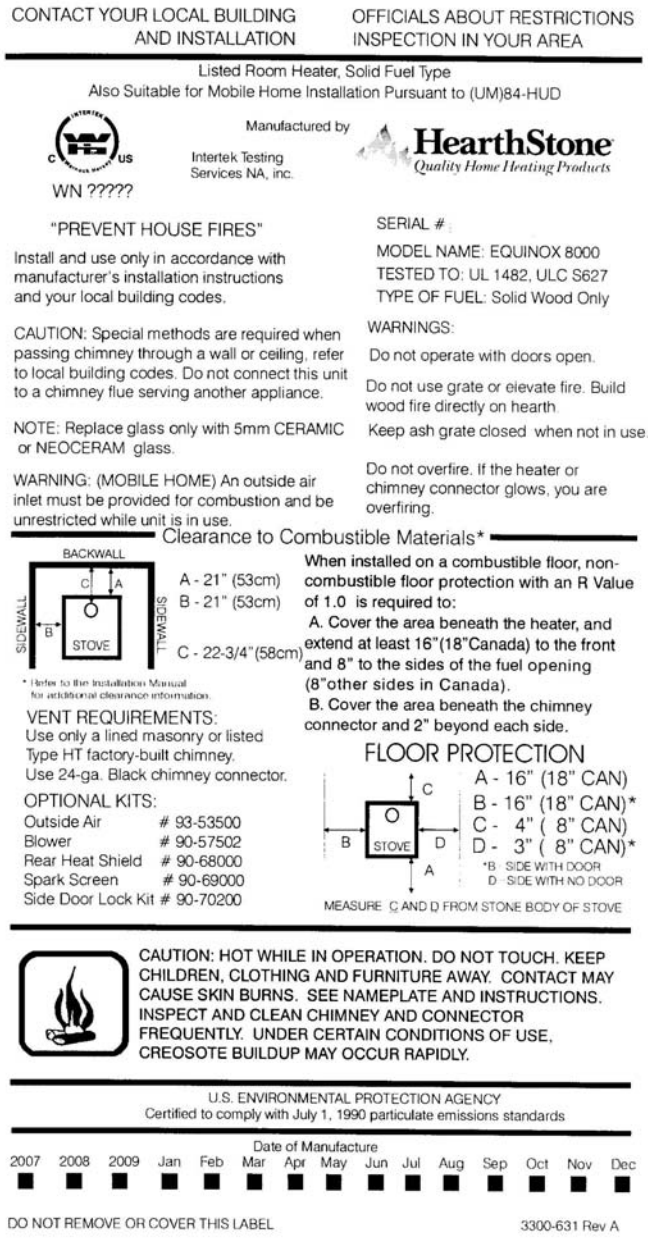
PROBLEM	POSSIBLE CAUSE	SOLUTIONS
STOVE SMOKES	Operating Technique	Fully open the primary air control one minute before opening doors.
	Cold Chimney	Preheat the chimney when first starting a fire. Briefly open a window in the room containing the stove.
	Blocked Chimney	Examine the chimney and stovepipe for blockage or creosote accumulations.
	Blocked outside air duct	Examine the duct and outside inlet for blockage caused by snow, insects, or debris accumulations.
	Oversized Chimney	Reline the chimney to the appropriate diameter
	Undersized Chimney	Install a draft inducer or replace the chimney.
	Chimney Too Short	Lengthen the chimney.
	Air Infiltration Into The Chimney	Seal chimney connections and openings in clean-out doors.
	More Than One Appliance Connected to the Flue	Disconnect all other appliances and seal openings.
BACK-PUFFING OR GAS EXPLOSIONS	Operating Technique	Fully open the primary air control one minute before opening the door and keep it fully open for a few minutes after reloading.
	Extra Low Burn Rate	Burn the stove at a higher burn rate.
	Blocked outside air duct	Examine the duct and outside inlet for blockage caused by snow, insects, or debris accumulations.
	Chimney Down-draft	Install a chimney cap.
	Excessive Ash Build-up	Empty the ash pan more frequently. Increase efficiency of burns, and avoid using poor quality or green wood.
UNCONTROLLED OR SHORT BURN	Unsealed or Open Door Open ash grate	Close the door tightly or replace the gaskets. Slide ash grate to closed position.
	Excessive Draft	Check the installation. Operate at LOW BURN. Install stovepipe damper.
	Extra Long Chimney	Shorten the chimney. Install stovepipe damper(s).
	Oversized Chimney	Reline the chimney to the proper diameter.
	High Winds or Hilltop Location:	Install a chimney cap.
	Excessive Draft	Draft in excess of 0.1 wc should be corrected with a stovepipe damper(s)
INSUFFICIENT HEAT	Poor Quality or Green Wood	Use only air-dried wood, preferably dried at least one year.
	Low Burn Rate	Operate the stove at a higher burn rate.
	Blocked outside air duct	Examine the duct and outside inlet for blockage caused by snow, insects, or debris accumulations.
	Air Insulated Chimney	Replace with a pre-fabricated insulated chimney system or a properly sized masonry chimney.
	Cold Exterior Chimney	Reline or insulate the chimney.
	Leaky Stovepipe or Chimney	Check the installation.
	Too Much Heat Loss From House	Add insulation, use energy efficient windows, or caulk windows, and seal openings in home.
	Excessive Ash Build-up	Empty the ash pan more frequently. Increase efficiency of burns, and avoid using poor quality or green wood.
BLISTERING OF FINISH	Operating Technique	Do not over-fire the stove. Monitor stove temperatures. Use seasoned wood only.
	Excessive Draft	Check the DRAFT. A damper may be required. Operate the stove at a LOW BURN range.

REPLACEMENT PARTS KITS & OPTIONAL ACCESSORIES:

ITEM	PART #	DESCRIPTION
		PART REPLACEMENT KITS
1	90-58205	GLASS REPLACEMENT KIT
2	90-73010	LATCH REPLACEMENT KIT
3	90-76010	BAFFLE REPLACEMENT KIT
4	90-58010	GASKET REPLACEMENT KIT
		DOCUMENTATION
5	6400-40455	OWNER'S MANUAL

ITEM	PART #	DESCRIPTION
		OPTIONAL ACCESSORIES
6	93-53500	OUTSIDE AIR KIT
7	90-57502	BLOWER
8	90-68000	REAR HEAT SHIELD
9	90-69000	SPARK SCREEN
10	90-70200	SIDE DOOR LOCK KIT

Safety Label


CONTACT YOUR LOCAL BUILDING AND INSTALLATION OFFICIALS ABOUT RESTRICTIONS INSPECTION IN YOUR AREA
Listed Room Heater, Solid Fuel Type
Also Suitable for Mobile Home Installation Pursuant to (UM)84-HUD
Manufactured by
Intertek Testing Services NA, inc.
HearthStone
Quality Home Heating Products
WN ?????
"PREVENT HOUSE FIRES"
Install and use only in accordance with manufacturer's installation instructions and your local building codes.
CAUTION: Special methods are required when passing chimney through a wall or ceiling, refer to local building codes. Do not connect this unit to a chimney flue serving another appliance.
NOTE: Replace glass only with 5mm CERAMIC or NEOCERAM glass.
WARNING: (MOBILE HOME) An outside air inlet must be provided for combustion and be unrestricted while unit is in use.
SERIAL #
MODEL NAME: EQUINOX 8000
TESTED TO: UL 1482, ULC S627
TYPE OF FUEL: Solid Wood Only
WARNINGS:
Do not operate with doors open.
Do not use grate or elevate fire. Build wood fire directly on hearth.
Keep ash grate closed when not in use.
Do not overfire. If the heater or chimney connector glows, you are overfiring.
Clearance to Combustible Materials*
BACKWALL
SIDEWALL
SIDEWALL
STOVE
A - 21" (53cm)
B - 21" (53cm)
C - 22-3/4" (58cm)
* Refer to the Installation Manual for additional clearance information.
When installed on a combustible floor, non-combustible floor protection with an R Value of 1.0 is required to:
A. Cover the area beneath the heater, and extend at least 16"(18"Canada) to the front and 8" to the sides of the fuel opening (8"other sides in Canada).
B. Cover the area beneath the chimney connector and 2" beyond each side.
VENT REQUIREMENTS:
Use only a lined masonry or listed Type HT factory-built chimney.
Use 24-ga. Black chimney connector.
OPTIONAL KITS:
Outside Air # 93-53500
Blower # 90-57502
Rear Heat Shield # 90-68000
Spark Screen # 90-69000
Side Door Lock Kit # 90-70200
FLOOR PROTECTION
STOVE
A - 16" (18" CAN)
B - 16" (18" CAN)*
C - 4" (8" CAN)
D - 3" (8" CAN)*
*B - SIDE WITH DOOR
D - SIDE WITH NO DOOR
MEASURE C AND D FROM STONE BODY OF STOVE
CAUTION: HOT WHILE IN OPERATION. DO NOT TOUCH. KEEP CHILDREN, CLOTHING AND FURNITURE AWAY. CONTACT MAY CAUSE SKIN BURNS. SEE NAMEPLATE AND INSTRUCTIONS. INSPECT AND CLEAN CHIMNEY AND CONNECTOR FREQUENTLY. UNDER CERTAIN CONDITIONS OF USE, CREOSOTE BUILDUP MAY OCCUR RAPIDLY.
U.S. ENVIRONMENTAL PROTECTION AGENCY
Certified to comply with July 1, 1990 particulate emissions standards
Date of Manufacture
2007 2008 2009 Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
DO NOT REMOVE OR COVER THIS LABEL
3300-631 Rev A

HEARTHSTONE WOODSTOVE LIMITED WARRANTIES

These warranties give you specific legal rights. You may also have other rights which vary from State to State. HearthStone Quality Home Heating Products, Inc. (HearthStone) warrants **to the original purchaser only** (the "Original Purchaser") the new woodstove manufactured by HearthStone and purchased by the Original Purchaser (the "Woodstove") against any of the occurrences listed in this document that result from defects in material or workmanship. All obligations of HearthStone under this document commence on the date the Original Purchaser purchases the Woodstove (the "Purchase Date").

LIMITED LIFETIME WARRANTY

HearthStone warrants the following parts of the Woodstove against the following occurrences that result from defects in material and workmanship:

- All cast iron parts – against breakage, cracking or burn-through.
- All stones – against cracking or breakage due to thermal stress, **excluding** surface and hairline cracks and scratches that do not affect the operation, or safety of the Woodstove.
- Primary and secondary air supply systems, including riser tubes, air wash system, secondary air manifold and stainless steel secondary air supply tubes – against breakage, cracking or burn-through.
- Glass – against breakage due to thermal shock.

LIMITED FIVE-YEAR WARRANTY

HearthStone warrants the following parts of the Woodstove against the following occurrences that result from defects in material and workmanship:

- Refractory brick – against breakage and deterioration ***not*** resulting from physical damage or over-loading of the Woodstove.
- Firebox baffle (the baffle above the secondary air tubes) – against breakage, cracking or burn-through.
- Door handles and latch mechanisms – against breakage.

This warranty expires on the fifth (5th) anniversary of the Purchase Date.

LIMITED ONE-YEAR WARRANTY

HearthStone warrants the following parts of the Woodstove against the following occurrences that result from defects in material and workmanship:

- Enamel Finish – against peeling or fading, **excluding** chipping, mechanical abrasion, chemical abrasion or crazing.
- Stove cement and all gaskets – against breakage or deterioration.
- Accessories and electrical components such as blowers, switches and thermo discs, **excluding** venting components, hearth components, electrical components and other components or accessories used in conjunction with the installation of the Woodstove ***not*** manufactured or supplied by HearthStone – against breakage or malfunction.

This warranty expires on the first (1st) anniversary of the Purchase Date.

EXCLUSIONS

The warranties contained in this document do not cover, nor is HearthStone responsible for:

1. Damage resulting from installation or operation of the Woodstove in a manner contrary to the owner's manual.
2. Damage to the Woodstove or cracking of stones due to improper break-in firing procedures.
3. Damage or non-performance resulting from faulty or incomplete setup, installation and start-up or mishandling, abuse, or misuse of the Woodstove, including but not limited to over-firing.
4. Damage resulting from shipping, installation, modification, alteration, and repair or service of the Woodstove by any party other than HearthStone or an authorized HearthStone dealer (a "Dealer").
5. Damage resulting from the use as fuel of driftwood, treated wood, wax, artificial or manufactured logs, coal or other material other than natural wood.
6. Damage due to water or due to installation of the Woodstove in a damp or high condensation area.

7. Damage due to installation of the Woodstove in an atmosphere contaminated by damaging chemicals, including but not limited to chlorine, fluorine or salts.
8. Scratches on glass, enameled surfaces or stones due to mechanical abrasion.
9. Standard wear and tear of the Woodstove resulting from normal usage over time.
10. Damage resulting from operational-related problems such as over-firing, downdrafts, smoke spillage, or use of corrosive driftwood.
11. Damage or inadequate performance caused by site, installation or environmental conditions beyond HearthStone's control, including but not limited to nearby trees, rooftops, buildings, wind, hills, mountains, inadequate or excessive venting, insufficient make up air, or negative air pressure whether or not caused by mechanical systems such as furnaces, exhaust fans, clothes dryers, etc.
12. A defect in any part of the Woodstove if the Original Purchaser fails to comply with HearthStone's or a Dealer's request to ship the part or the Woodstove to HearthStone or a Dealer, as the case may be.

THE WARRANTIES CONTAINED IN THIS DOCUMENT ARE EXCLUSIVE AND ARE GIVEN BY HEARTHSTONE AND ACCEPTED BY THE ORIGINAL PURCHASER IN LIEU OF ALL OTHER EXPRESS WARRANTIES AND ANY OBLIGATIONS, LIABILITIES, RIGHTS, CLAIMS, OR REMEDIES IN CONTRACT OR TORT, WHETHER OR NOT ARISING FROM HEARTHSTONE'S NEGLIGENCE, ACTUAL OR IMPUTED. ALL IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE GIVEN **ONLY** TO THE EXTENT REQUIRED BY FEDERAL OR STATE LAW. EXCEPT AS OTHERWISE REQUIRED BY STATE LAW, UPON THE EXPIRATION OF THE EXPRESS LIMITED WARRANTIES CONTAINED HEREIN, **NO** IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, SHALL APPLY TO THE SUBJECT WOODSTOVE. **SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.**

THE WARRANTIES CONTAINED IN THIS DOCUMENT EXTEND **ONLY** TO THE ORIGINAL PURCHASER OF THE WOODSTOVE WARRANTED HEREUNDER. THEY DO NOT EXTEND TO ANY SUBSEQUENT OWNERS.

UNDER NO CIRCUMSTANCES SHALL HEARTHSTONE BE LIABLE TO THE ORIGINAL PURCHASER OR ANY OTHER PERSON FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO DAMAGE TO PROPERTY OR PERSONAL INJURIES, WHETHER ARISING OUT OF BREACH OF WARRANTY, TORT, OR OTHERWISE, EVEN IF HEARTHSTONE HAS BEEN APPRAISED OF THE POSSIBILITY OF SUCH DAMAGES. **SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.**

QUALIFYING FOR WARRANTY COVERAGE

To obtain performance of any obligation under this document, the Original Purchaser must, **within the applicable warranty time period**, contact HearthStone, at the address listed in the Warranty Registration section below or a Dealer for instructions regarding the return of defective parts for repair, the return of the Woodstove for repair, or a Dealer service call. The Original Purchaser should refer to the Dealer network search engine contained on HearthStone's Web site (www.hearthstonestoves.com) to find a Dealer nearest the Original Purchaser's location.

REMEDY

The remedy for any breach of the foregoing warranties will consist of repair or replacement, at HearthStone's option, of any covered defect in the Woodstove. When the Original Purchaser contacts HearthStone or a Dealer, HearthStone or the Dealer, as the case may be, will instruct the Original Purchaser to **either** return the defective part, or the entire Woodstove (if needed), with shipping prepaid, to HearthStone or a Dealer **or** allow a Dealer to make a service call at the place where the Woodstove is located. In the event the Original Purchaser refuses to allow a Dealer to make a service call, HearthStone or a Dealer, as the case may be, will request that the Original Owner return the defective part, or the entire Woodstove (if needed), with shipping prepaid, to HearthStone or a Dealer. **Notwithstanding any other provision of this document, the Original Purchaser shall pay for any travel fees and service charges related to a Dealer's service call**.

Parts: HearthStone will replace defective parts covered by the foregoing warranties at no charge.
Labor: Within the first (1st) year after the Purchase Date, HearthStone will pay for warranty labor performed by a Dealer at HearthStone's published labor rates in effect at the time the labor is performed. Thereafter, the Original Purchaser is responsible for the cost of labor.
Shipping cost for parts: Within the first ninety (90) days after the Purchase Date, HearthStone will pay for the shipping of Woodstove parts covered by any of the foregoing warranties to and from HearthStone or a Dealer, as the case may be. Thereafter, the Original Purchaser is responsible for all shipping costs related to shipping Woodstove parts to and from HearthStone or a Dealer, as the case may be.
Shipping cost for the Woodstove: Within the first (1st) year after the Purchase Date, if the Original Purchaser is instructed to return the Woodstove to HearthStone or a Dealer for repair, HearthStone will pay fifty percent (50%) and the Original Purchaser will pay fifty percent (50%) of the shipping costs related to shipping the Woodstove to and from HearthStone or a Dealer, as the case may be. Thereafter, the Original Purchaser is responsible for one hundred percent (100%) of all of the shipping costs related to shipping the Woodstove to and from HearthStone or a Dealer, as the case may be. Notwithstanding any other provision of this document, in no event will HearthStone pay for any Dealer fees or other fees for pick up or delivery of the Woodstove returned for repair; the Original Purchaser shall be responsible for any such fees.

WARRANTY REGISTRATION
The Original Purchaser may send a completed and signed Warranty Registration Form, which is enclosed in the Woodstove warranty packet, to the following address:

HearthStone Quality Home Heating Products, Inc.
Warranty Department
317 Stafford Avenue
Morrisville, VT 05661

NOTE: SENDING IN THE SIGNED WARRANTY REGISTRATION FORM IS *NOT* A CONDITION OF WARRANTY COVERAGE, OR HEARTHSTONE'S PERFORMANCE.

Notes: